1 Project Checklist

1.1 Display Logic

◇ Display static level with ball, walls and holes.
◇ Correctly displays level changes.
◇ Correctly displays moving ball.
◇ Correct display priority for ball, holes and walls.

1.2 External Interfaces

◇ Working write to ADC FSM
◇ Working read from ADC FSM
◇ Working overall ADC FSM
◇ SPI interface works and ADC correctly samples data

1.3 Physics Unit

◇ Correctly converts sampled data to FSM-compatible acceleration signals

1.4 Collision Detection FSM

◇ Correctly computes new velocity data based on acceleration signals.
◇ Correctly handles collision detection with walls.
◇ Correctly handles collision detection with obstacle holes.
◇ Correctly handles collision detection with target holes.

1.5 Memory Interface

◇ Correctly mediates memory accesses from FSM and Display Logic.

1.6 Calibration

◇ If needed, calibration text display
◇ If needed, calibration of accelerometers provides feedback on proper measurements
◇ Correctly handles level transitions.
◇ Correctly updates state of game.

1.7 Extensions

◇ Velocity decreases due to friction
◇ Physics unit models rotational inertial and friction
◇ "Stargate" holes
◇ Implement design on a starter board